



H/W Specifications

Network Interface

- Type: 1 x 10/100Mbps Ethernet, RJ45 connector
- Protection: 1.5KV magnetic isolation
- Protocol: Modbus / TCP, UDP, HTTP, DHCP

Thermocouple Input

- J type: Maxim MAX31855J converter with CJC
Range: -210°C~+1200°C
- K type: Maxim MAX31855K converter with CJC
Range: 200°C~+1350°C
- Resolution: 14-bit, 0.25°C
- Connector: OMEGA PCC-SMP Thermocouple connector
Thermocouple fault detection

Relay Output

- No. of Channels: 1 x Form C
- Contact Rating: 30VDC@1A or 125VAC@0.5A

Isolated Digital Input

- No. of Channels: 2
- Logic High: 5~24VDC
- Logic Low: 0~1.5VDC
- Input Resistance: 1.2K Ohm@0.5W
- Response Time: 20μs

Mechanical

- Power: 9~48VDC terminal block
- Protection: Auto polarity and surge protect
- Dimensions (W x H x D): 78 x 108 x 25mm

Front View

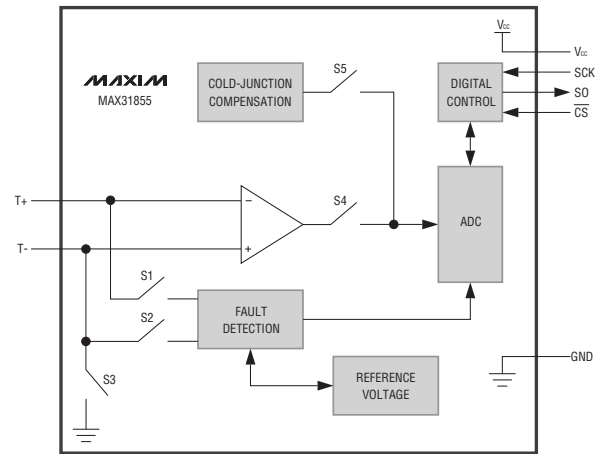


Features

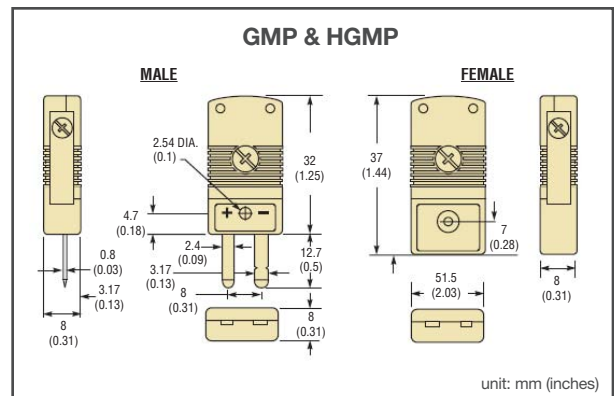
- Remote thermocouple input module with web access AJAX and Modbus / TCP
- 1 x 10/100Mbps Ethernet port
- 3 channels J or K type thermocouple input with cold junction compensation
- 2 x 2500Vrms isolated digital input (bipolar input photocoupler)
- 1 x Form C relay with contact rating 30VDC@1A or 125VAC@0.5A
- Support web-based temperature monitoring and DIO control
- Optional DIN RAIL mounting kit (DK-35A)
- Windows configuration utility included

Thermocouple Input

The thermocouple input is connected to MAX31855 Cold Junction Compensated Thermocouple to Digital Converter. The connector is OMEGA PCC-SMP. Please make sure the type of thermocouple matches the model of RIO-2018. Please refer to datasheet of MAX31855 for the technical specification of thermocouple measurement.



Thermocouple Connector



Ordering Information

- **RIO-2018**
Analog Input Remote I/O Module
- **DK-35A**
DIN RAIL Mounting Kit
- **PWR-12V-1A**
110~240VAC to 12VDC 1A Power Adapter
- **Software Utility**
Download from Artila web